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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------|----------------------|---------------------|------------------|
| 09/920,887 | 08/03/2001 | Satoko Araki | 520.40415X00 9820 | |
| 24956 75 | 90 02/27/2006 | | EXAMINER | |
| MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 | | | BATURAY, ALICIA | |
| | | | ART UNIT | PAPER NUMBER |
| ALEXANDRIA | ALEXANDRIA, VA 22314 | | | - |

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(a) | | | |
|---|---|---------------------|--|--|--|
| | Application No. | Applicant(s) | | | |
| Office Action Summers | 09/920,887 | ARAKI ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Aficia Baturay | 2155 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 19 De | ecember 2005. | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| · | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>16-27</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>16-27</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | r election requirement | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examine | r. | | | | |
| 10) $igotimes$ The drawing(s) filed on <u>03 August 2001</u> is/are: | a)⊠ accepted or b)☐ objected | to by the Examiner. | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152) | | | | | |
| Paper No(s)/Mail Date <u>08032001</u> . 6) Other: | | | | | |

Application/Control Number: 09/920,887

Art Unit: 2155

DETAILED ACTION

1. This Office Action is in response to a request for continued examination under 37 CFR

1.114, including the fee set forth in 37 CFR 1.17(e), which was filed in this application after

Page 2

final rejection. Since this application is eligible for continued examination under 37 CFR

1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

submission filed on 19 December 2005 has been entered.

2. Claims 1-15 were cancelled.

3. Claims 16-27 were added.

4. Claims 16-27 are pending in this Office Action.

Response to Amendment

5. The objections to claims 5-7, 10 and 14 regarding minor informalities are moot due to

cancellation of aforementioned claims.

6. The rejection is respectfully maintained as set forth in the last Office Action mailed on 23

June 2005. Applicant's arguments with respect to claims 1-15 and new claims 16-27 have

been fully considered but they are not persuasive and the old rejection maintained.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 16, 17, 19-21, 23-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray ("Windows NT SNMP") and further in view of Singh et al. (U.S. 5,758,083).

Murray teaches the invention substantially as claimed including SNMP-based network management by a set of objects (see Murray, page 4, "The Simple Protocol").

9. With respect to claim 16, Murray teaches a method of managing a network system including a first network element connected to a graphical local craft terminal for maintaining the network system and a plurality of network elements which are targets of maintenance (Murray, page 4, "The Simple Protocol," paragraph 5, Fig. 1-1), where when a second network element is added to the network system or settings of the second network element are changed, the method is enabled to register addresses and change addresses automatically by sending or receiving the addresses between the first network element and the second network element (Murray, page 341, Identifying SNMP-managed nodes), the method comprising the steps of:

Accepting, by the first network element, input of a system identifier (ID) of the second network element (the management application would then send a GetRequest message to each active node to retrieve the sysObjectID value of the node); assembling, by the first network element, a first Protocol data Unit (PDU) inquiring of an address corresponding to the input system ID; sending, by the first network element, the first PDU along the network system (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address); comparing, by each network element of the network elements on the network system, the system ID included in the first PDU with a system ID of the each network element when receiving the first PDU (once an SNMP-managed node is identified, the management application usually requests management data from the managed node); sending back, by the each network element, a second PDU including an address of the each network element when the system ID included in the first PDU matches the system ID of the each network element (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address - see Murray, page 341, Identifying SNMPmanaged nodes); getting, by the first network element, the address of the second network element by receiving the second PDU sent back (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address - see Murray, page 341, Identifying SNMP-managed nodes); sending, by the second network element, a fourth PDU including a system ID (sysObjectID) and an address of the second network element to the first network

element (the sending process operates to forward certain of the network management information (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address – see Murray, page 341, Identifying SNMP-managed nodes); and enabling the first network element to be in an accessible state to the second network element (once an SNMP-managed node is identified, the management application usually requests management data from the managed node – see Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes or a first network element sending another network element a PDU containing the address of the first network element.

However, Singh teaches sending, by the first network element, a third PDU including a system ID (sysObjectID) and an address (the network IP address - see Murray, page 341, Identifying SNMP-managed nodes) of the first network element to the second network element (sending process operates to forward certain of the network management information (e.g. topology information) to the appropriate receiving stations – see Singh, col. 8, lines 11-15); generating, by the second network element, an address management Managed Object (MO) for the first network element based on information of the first network element included in the received third PDU (the receiver process then in turn supplies the network management information to the network manager so that the network manager can utilize the additional network management information from the sending station to at least partially provide network management – see Singh, col. 8, lines 57-63) and

generating, by the first network element, an address management MO for a network element added or changed based on information of the second network element in the received fourth PDU (in the peer-to-peer configuration, the network management console machines both send and receive topology information to each other. In this configuration, each network management console machine includes both a sender and a receiver process, and thus functions as both a receiving and sending station – see Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable generating managed objects at each node for all other managed nodes or a first network element sending another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

10. With respect to claim 17, Murray teaches the invention described in claim 16, including a fourth PDU including a system ID (sysObjectID) and an address of the second network element to the first network element (the sending process operates to forward certain of the network management information (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address – see Murray, page 341, Identifying SNMP-managed nodes).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a method for managing a network system where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the address management MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63), and where the fourth PDU includes a system ID of the plurality of network elements added or changed and the first network element generates the address management MO for the plurality of network elements added or changed by using an address and a system ID included in the fourth PDU (Singh, col. 5, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable generating managed objects at each node for all other managed nodes or a first network element sending another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

With respect to claim 19, Murray teaches the invention described in claim 16, including a method for managing a network system where the first or second network element searches whether there is an address management MO corresponding to a network element which sends the third or fourth PDU when receiving the third or fourth PDU, generates a new address management MO if there is not, and generates a new address management MO after deleting existing object if there is, when an address managed by the existing object is

different with the address included in the third or fourth PDU as result of comparison (Murray, page 65-66, Four Simple Operations, Get and Set operations).

- 12. Claims 20, 21, 23-25 and 27 do not teach or define any new limitations above claims 16, 18 and 19 and therefore are rejected for similar reasons.
- 13. Claims 18, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray in view of Singh and further in view of Karau et al. (U.S. 6,473,502).
- 14. With respect to claim 18, Murray teaches the invention described in claim 16, including whereby specification of the MO for the first network element and the MO for second network element are based on specification of Open System Interconnection (OSI) (Murray, page 30, The OSI Reference Model).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a method for managing a network system where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the address management MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable generating managed objects

at each node for all other managed nodes or a first network element sending another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

Murray teaches whereby specification of the MO for the first network element and the MO for second network element are based on specification of Open System Interconnection (OSI) (Murray, page 30, The OSI Reference Model).

Murray does not explicitly teach generating managed objects at each node for all other managed nodes.

However, Singh teaches a method for managing a network system where the third PDU includes a system ID of the first network element (Singh, col. 8, lines 11-15) and the second network element generates the address management MO for the first network element by using an address and a system ID included in the third PDU (Singh, col. 8, lines 57-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murray in view of Singh in order to enable generating managed objects at each node for all other managed nodes or a first network element sending another network element a PDU containing the address of the first network element. One would be motivated to do so in order to enable a network management system that allows for sharing of network management data between a plurality of distributed nodes.

The combination of Murray and Singh does not explicitly teach the use of NSAP or PSAP addresses.

Application/Control Number: 09/920,887

Art Unit: 2155

However, Karau teaches a method for managing a network system where the address

Page 10

included in the second PDU is a Network Service Access Point (NSAP) Address, and the

address included in the third and fourth PDU is a Presentation Service Access Point (PSAP)

address (Karau, col. 27, lines 35-41).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the combination of Murray and Singh in view of Karou in order to

facilitate network management support information that is updated on a real-time basis to

insure accurate analysis and trouble shooting.

15. Claims 22 and 26 do not teach or define any new limitations above claims 16-19 and

therefore are rejected for similar reasons.

Response to Arguments

- 16. Applicant's arguments filed 19 December 2005 have been fully considered, but they are not persuasive for the reasons set forth below.
- 17. Applicant Argues: Applicant states "Thus, Murray, Singh and Karau whether taken individually or in combination with each other fail to teach or suggest 'Accepting, by the first network element, input of a system identifier (ID) of the second network element; assembling, by the first network element, a first Protocol data Unit (PDU) inquiring of an address corresponding to the input system ID; sending, by the first network element, the first PDU along the network system; comparing, by each network element of the network elements on the network system, the system ID included in the first PDU with a system ID of the each network element when receiving the first PDU; sending back, by the each network element, a second PDU including an address of the each network element when the system ID included in the first PDU matches the system ID of the each network element."

In Response: The examiner respectfully submits that Murray teaches accepting, by the first network element, input of a system identifier (ID) of the second network element (the management application would then send a GetRequest message to each active node to retrieve the sysObjectID value of the node); assembling, by the first network element, a first Protocol data Unit (PDU) inquiring of an address corresponding to the input system ID; sending, by the first network element, the first PDU along the network system (once an SNMP-managed node is identified, the management application usually requests

management data from the managed node, data commonly requested includes the network IP address); comparing, by each network element of the network elements on the network system, the system ID included in the first PDU with a system ID of the each network element when receiving the first PDU (once an SNMP-managed node is identified, the management application usually requests management data from the managed node); sending back, by the each network element, a second PDU including an address of the each network element when the system ID included in the first PDU matches the system ID of the each network element (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address – see Murray, page 341, Identifying SNMP-managed nodes) This renders the rejection proper, and thus rejection stands.

18. Applicant Argues: Applicant states "Further, Murray, Singh and Karau whether taken individually or in combination with each other fail to teach or suggest 'getting, by the first network element, the address of the second network element by receiving the second PDU sent back; sending, by the first network element, a third PDU including a system ID and an address of the first network element to the second network element and generating, by the second network element, an address management Managed Object (MO) for the first network element based on information of the first network element included in the received third PDU."

In Response: The examiner respectfully submits that the combination of Murray and Singh teaches getting, by the first network element, the address of the second network element by receiving the second PDU sent back (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address – see Murray, page 341, Identifying SNMP-managed nodes); sending, by the first network element, a third PDU including a system ID (sysObjectID) and an address (the network IP address - see Murray, page 341, Identifying SNMP-managed nodes) of the first network element to the second network element (sending process operates to forward certain of the network management information (e.g. topology information) to the appropriate receiving stations – see Singh, col. 8, lines 11-15) and generating, by the second network element, an address management Managed Object (MO) for the first network element based on information of the first network element included in the received third PDU (the receiver process then in turn supplies the network management information to the network manager so that the network manager can utilize the additional network management information from the sending station to at least partially provide network management – see Singh, col. 8, lines 57-63). This renders the rejection proper, and thus rejection stands.

19. Applicant Argues: Applicant states "Still further, Murray, Singh and Karau whether taken individually or in combination with each other fail to teach or suggest 'sending, by the second network element, a fourth PDU including a system ID and an address of the second

network element to the first network element; generating, by the first network element, an address management MO for a network element added or changed based on information of the second network element in the received fourth PDU and enabling the first network element to be in an accessible state to the second network element as recited in the claims."

In Response: The examiner respectfully submits that the combination of Murray and Singh teaches sending, by the second network element, a fourth PDU including a system ID (sysObjectID) and an address of the second network element to the first network element (the sending process operates to forward certain of the network management information (once an SNMP-managed node is identified, the management application usually requests management data from the managed node, data commonly requested includes the network IP address - see Murray, page 341, Identifying SNMP-managed nodes); generating, by the first network element, an address management MO for a network element added or changed based on information of the second network element in the received fourth PDU (in the peer-topeer configuration, the network management console machines both send and receive topology information to each other. In this configuration, each network management console machine includes both a sender and a receiver process, and thus functions as both a receiving and sending station – see Singh, col. 5, lines 29-34) and enabling the first network element to be in an accessible state to the second network element as recited in the claims (once an SNMP-managed node is identified, the management application usually requests management data from the managed node - see Murray, page 341, Identifying SNMPmanaged nodes). This renders the rejection proper, and thus rejection stands.

Application/Control Number: 09/920,887

Art Unit: 2155

Conclusion

Page 15

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner

can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh

Najjar can be reached on (571) 272-4006. The fax number for the organization where this

application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay February 15, 2006

SUPERVISORY PATENT EXAMINER